File 17

Agnico Mines

LIMITED

ANNUAL
REPORT

FOR THE YEAR ENDED DECEMBER 31, 1966

Aerial view of reclamation plant, looking northwest across Cobalt Lake. Tailings are partially exposed in the lake bed at this stage of lowering the water level.

AGNICO MINES LIMITED

ANNUAL REPORT TO THE SHAREHOLDERS

For the Financial Year Ended December 31st

1966

AGNICO MINES LIMITED

REPORT FOR THE YEAR ENDED DECEMBER 31, 1966

Executive and Head Office	Suite 1101, 365 Bay Street, Toronto, Ontario
Mine Office	Cobalt, Ontario
Directors	MILTON KLYMAN BERNARD KRAFT HON. C. P. McTAGUE, Q.C. (Deceased) JULIUS OSHEROFF PAUL PENNA NORMAN B. SHERIFF JOHN J. VORBACH, Jr.
Officers	NORMAN B. SHERIFF, *President* PAUL PENNA, *Vice-President and Managing Director* BERNARD KRAFT, *Secretary-Treasurer*
Mine Manager	GORDON W. KIRK
Consulting Engineer	WALTER F. BROWN, B.Sc., P.Eng.
Transfer Agent and Registrar	Guaranty Trust Company of Canada Toronto, Ontario
Auditors	Thorne, Mulholland, Howson & McPherson Chartered Accountants, Toronto, Ontario
Bankers	Canadian Imperial Bank of Commerce Toronto, Ontario (City Hall Branch)
Shares Listed	Toronto Stock Exchange, Toronto, Ontario
Annual Meeting	April 27, 1967, 11:00 in the forenoon (Toronto Time) Algonquin Room, Royal York Hotel, Toronto, Ontario

DIRECTORS' REPORT

To the Shareholders:

Your Directors are pleased to present the audited financial statements of the company for the year ended December 31, 1966, and also the report of the Mine Manager which provides details of mine operations, development and exploration results for this period. The following is a summary of these reports, along with a brief commentary on projected operations for the current year.

Financial

Gross metal revenue from mine operations of $1,083,288 compares with $1,486,633 the previous year, and the operating profit amounted to $144,673 compared with $473,262 in 1965. The latter figures are before deducting outside exploration expenditures in 1966 totalling $86,561, and non-cash write offs for depreciation and amortization of deferred development expenditures. After deducting these items there was a net loss for the year of $87,091, which compares with net income for 1965 of $323,042.

The decrease in metal revenue reflects the phasing out early in the year of two production units, the Christopher and O'Brien mines. The lower operating profit is substantially the combined effect of this reduced production; a decrease in revenue from custom milling to $8,055 compared with $147,580 in 1965; and a decrease in royalty income to $16,200 compared with $27,327 in the previous year. Outside exploration expenditures amounting to $86,561 were charged against current mine operating revenue. There was no corresponding charge against operations in 1965.

The decrease in working capital to $519,504 from $857,182 in 1965 is entirely the result of expenditures during the year for the tailings reclamation plant and related facilities which is reflected in the increase in the valuation of fixed assets less accumulated depreciation, amounting to $352,821.

Production

Production of silver of 802,151 ounces, and of cobalt amounting to 71,779 pounds, showed a decrease from 1,101,932 ounces and 93,257 pounds respectively, produced in 1965. There was also a corresponding decrease in the quantities of nickel and copper produced.

As intimated in the Interim Report to Shareholders covering the nine month period ended September 30, 1966, the Cart Lake #2 Shaft production unit was closed down at the end of the year. During the year, approximately 8,950 tons of ore were milled from the Cart Lake and contiguous #86 Shaft area. The two veins mined above the 100 foot level of the Cart Lake Shaft proved to be limited in continuity, and underground exploration including extensive diamond drilling did not locate silver occurrences of ore grade within access to the workings. In view of these results and the modest ore recovery, the cost of maintaining this unit was not justified.

A near-surface highgrade silver intersection was indicated by drilling at a location about 500 feet east of the Cart Lake underground workings and this will be further explored during the coming summer.

DIRECTORS' REPORT (Continued)

The Agnico 407 Mine which is presently the sole mine production unit, was responsible for over 60% of the total mill feed during the year, and approximately 78% of the total silver recovery. It is now producing ore from three levels, including the 445 foot level where the crosscut has been advanced to the ore zone indicated by earlier drilling, located about 1,200 feet southeast of the shaft. This area is also being opened up on the 365 foot level by drifting southeast on a strong fault zone along which numerous silver veins have been exposed. Underground diamond drilling is now being carried out to evaluate the complex vein system in this area.

The Mine Manager's Report outlines the encouraging results and new ore indications being obtained in the Agnico 407 Property. The ore zone currently being opened up and explored from two levels 1,200 feet southeast of the shaft presents good tonnage potential.

It is noteworthy that other excellent targets are being tested over a widespread area on this property, including the strong vein containing several shoots of good grade silver which has been developed for a length of 300 feet to the north of the shaft on the 300 foot level. Diamond drilling on this level has also indicated a potential ore zone 200 feet east of the shaft.

The area within which silver bearing veins and vein systems have, and are being developed and mined on the Agnico 407 Property extends northwest by southeast for a distance of approximately 2,000 feet by about 600 feet. The results to date since this property came into initial production early in 1965, suggests that many additional silver producing veins are likely to be found as underground development continues to open up new ground for exploration.

Despite the favourable geological environment, extensive diamond drilling from the underground workings of the 150 Shaft Property located about 2,000 feet west of the 407 Shaft, was not successful in locating silver veins of economic value and this exploration unit was accordingly terminated at the year end.

Tailings Reclamation Division

During the year, construction of the 1,000 ton capacity tailings treatment plant and installation of ancillary equipment was completed. This plant is designed to recover the silver contained in the approximate one million tons of tailings in the bed of Cobalt Lake owned by your company. Grade of these tailings, the product of various former milling operations of the Cobalt Camp, is estimated to be about four ounces of silver per ton.

An initial test run of the plant was made during October with satisfactory results. The indicated recovery achieved in this test run was 75.7% which compares favorably with earlier estimates. As previously mentioned, it is planned to operate the tailings treatment plant on a six to seven months basis, closing down during the winter when freezing conditions make difficult the pumping of tailings. The

450 ton capacity Penn Mill will be operated during the winter months, supplied by mine ore stockpiled during the summer months and from current mine production. The same mill personnel will be employed at both plants and the increased throughput rate at the Penn Mill should result in greater efficiency and reduced unit treatment costs.

It is expected that income from the tailings retreatment operation will provide an appreciable supplement to your company's income and earnings. On the basis of the projected rate of operations of the tailings treatment plant, the approximate one million tons of tailings presently owned by your company would be adequate for several years. In the forward planning of future operations, your company will endeavour to secure additional feed for this plant. In this connection it is noted that under a recent agreement the company has secured the right to remove and treat a quantity of tailings containing silver which are presently privately owned at a location within economic access to the plant. Under the terms of the agreement whereby the company secured the purchase rights for the sum of $5,000, the vendors of the tailings will be entitled to receive 30% of the net proceeds from the sale of the silver and all other saleable minerals recovered from these tailings. The agreement covers a period terminating October 1, 1973.

It is of interest to note that the cost of the treatment plant and related facilities was financed out of the company's working capital and was completed within the range of previously estimated project costs.

The capable work of the technical personnel and mine employees, and the continued loyal support of the shareholders is gratefully acknowledged by the Board of Directors.

It is with profound regret that we note the death during November, 1966, of the Hon. C. P. McTague, Q.C., who was elected a Director of the company at the last Annual Meeting.

On behalf of the Board of Directors,

PAUL PENNA,
Managing Director.

March 24, 1967.

The reclamation barge in operation during test run in October, 1966. The barge is equipped with three pumps, two of these hydraulic the tailings, one piped to an on-shore surge tank to feed the mill; the other as a source of solids-bearing water for use in monitoring, cutting down banks of tailings into the pond in which the barge will operate.

MANAGER'S REPORT

The President and Directors,
AGNICO MINES LIMITED,
Suite 1101 - 365 Bay Street,
TORONTO 1, Ontario.

March 8, 1967.

Gentlemen:

I am pleased to submit the following report which covers the operations of Agnico Mines Limited for the year ended December 31st, 1966.

PRODUCTION

The main source of production during 1966 was from 407 Shaft which is now producing ore from three levels. Stoping on the third level has produced very rich ore from veins of limited vertical dimensions. The Cart Lake #2 Shaft produced a modest tonnage of ore up until the end of the year. The Christopher and O'Brien properties produced a small tonnage of ore before being closed down early in the year.

The average monthly production for 1966 was 66,845 ounces. The decrease from the previous year is a result of reduced production due to phasing out two producing properties.

The following is a comparative summary of the main production items:

	1966	1965
Ounces silver produced	802,151	1,101,932
Pounds cobalt produced	71,779	93,257
Gross value of metals sold	$1,083,288	$1,486,633
Gross value per ounce of contained silver	$1.35	$1.35
Total tons milled from company properties	47,550	70,975
Custom ore milled	1,790	38,051
Total tons milled	49,340	109,026
Total tons hoisted	46,848	74,198
Calculated head ounces silver/ton	17.69	16.40
Recovery ounces silver/ton	16.87	15.53
Extraction efficiency	95.36%	94.64%

EXPLORATION AND DEVELOPMENT

407 SHAFT — The development heading on the fourth (445′) level was advanced to an ore zone 1,200 feet southeast of the shaft. Three headings were extended northeast from the main heading to develop veins that have their roots in the Keewatin rock at this horizon and continue into the overlying Cobalt sediments. This area was also entered on the third (365′) level by drifting southeast on a strong fault zone from which numerous silver veins were exposed by drifting. Diamond drilling is being concentrated in this area to evaluate the complex vein system.

On the second (300′) level north of the shaft, a strong vein containing several shoots of good grade silver was developed for a length of 300 feet. Diamond drilling on this level indicates a potential ore zone 200 feet east of the shaft.

Drill holes probing the Penn Canadian ground to the south revealed interesting geological information as well as some low grade silver intersections. More drilling is required to thoroughly explore this area.

CART LAKE PROPERTY — Stoping operations were limited to two veins which were mined above the 100 foot level but pinched out before reaching surface.

A highgrade silver intersection located 500 feet east of the workings and close to surface will be further tested this summer.

Broken ore reserves were hoisted to surface and the property was closed down at the end of the year. An extensive diamond drill programme failed to locate silver occurrences of ore grade accessible from the workings.

150 SHAFT — A very extensive diamond drill programme was carried out from the underground workings of this shaft located 2,000 feet west of 407 shaft.

Although geological conditions are favourable for silver ore deposition in this area, the drilling did not intersect veins of economic value.

Upon completion of the diamond drill programme which has eliminated all possibility of significant ore shoots in this area, the exploration project was terminated.

CHRISTOPHER AND O'BRIEN PROPERTIES — Operation of these properties was suspended early in the year when an exhaustive underground exploration programme failed to locate new silver occurrences of ore grade.

A geochemical soil sampling survey was carried out on Claim #402 to the north of the O'Brien. The results were encouraging and warrant further work being done this spring.

The following is a tabulation of this exploration and development:

	1966 Footage	Unit Cost	1965 Footage	Unit Cost
Crosscutting and Drifting	4,434	$29.31	6,775	$29.76
Raising	1,309	20.81	3,047	19.70
U/G Diamond Drilling	48,044	3.96	54,140	3.26
Surface Diamond Drilling	5,704	4.30	12,490	4.47

TAILINGS RECLAMATION PROJECT — A mill located on the south shore of Cobalt Lake has been rehabilitated and equipped to recover silver from an estimated one million tons of tailings averaging about 4 ounces per ton.

A barge on the lake is used to pump the tailings to the mill at a rate of 1,000 tons per day where they are processed by grinding and flotation.

A satisfactory test run was made in October resulting in an indicated recovery of 75.7%.

It is planned to use the personnel from the Penn Mill to operate the Tailings Mill from May to October, after which time freezing conditions make it difficult to pump tailings. The Penn Mill will run during the winter months on a higher tonnage basis, supplied by ore stockpiled during the summer months plus current mine production. This will result in a more efficient operation.

FUTURE EXPLORATION

96 TUNNEL — An underground diamond drill programme is planned for this area which is located north of the Cart Lake Shaft. Surface diamond drilling produced some encouraging results beneath old workings in the Cobalt sediments. This area can be adequately explored by short diamond drill holes put out from underground workings.

SHORT LAKE AREA — Former operators performed a limited amount of underground work on this property, in cobalt sediments down to the 190 foot level. A small amount of high grade silver was produced from the Cobalt Lake fault which passes through the property. Information obtained from the workings on adjoining properties indicates that the sedimentary rocks could be much deeper along the fault zone and might very well be productive at the lower horizons.

It is planned to thoroughly explore this potential ground by a surface diamond drill programme.

COLONIAL PROPERTY — Underground diamond drilling will be carried out from adit workings to explore the upper contact of the diabase sill and the Keewatin rocks lying above. Some rich ore shoots were encountered here by former operators.

GENERAL

Although exploration drilling carried out at 150 Shaft has fallen short of expectations, every effort is being made to increase production at 407 Shaft and to expand our exploration programme.

I wish to extend my appreciation to the Board of Directors, Staff and employees for their effective cooperation throughout the year.

Respectfully submitted,

AGNICO MINES LIMITED,

G. W. KIRK,
Manager.

BALANCE SHEET — *December 31, 1966*

(With comparative figures for 1965)

ASSETS

CURRENT ASSETS:

Cash
Short-term deposit
Smelter settlements outstanding, at estimated net realizable value
Concentrates on hand, at estimated net realizable value
Marketable securities, at cost (market value 1966, $154,000; 1965, $46,000)
Accounts receivable
Special Refundable tax recoverable
Supplies, at average cost
Prepaid expenses

DEPOSITS:

Special Refundable tax
Power contracts
Other

INVESTMENTS IN WHOLLY OWNED SUBSIDIARY COMPANIES, at nominal value, (note 1)

FIXED ASSETS:

Buildings, machinery and equipment (note 2)
Less accumulated depreciation

Mining properties (note 3)

DEFERRED EXPENDITURES, LESS AMORTIZATION:

Operating
Development

LIABILITIES

CURRENT LIABILITIES:

Accounts payable and accrued liabilities
Royalty income received in advance

SHAREHOLDERS' EQUITY

CAPITAL STOCK:

Authorized, 5,000,000 shares, par value $1 each
Issued, 3,434,327 shares
Less Discount thereon

DEFICIT

AGNICO MINES LIMITED

Incorporated under the laws of Ontario

966	1965
21,916	152,810
	200,000
61,921	457,361
69,617	33,230
81,510	40,150
14,047	37,286
7,198	
24,009	22,327
15,673	9,584
95,891	952,748
3,902	
20,836	17,806
1,250	1,250
25,988	19,056
2	2
73,920	1,606,426
20,852	1,506,179
53,068	100,247
28,561	328,561
81,629	428,808
7,731	9,614
78,719	186,002
86,450	195,616
89,960	$1,596,230
73,262	92,441
3,125	3,125
76,387	95,566
34,327	3,434,327
53,650	1,053,650
80,677	2,380,677
67,104	880,013
13,573	1,500,664
89,960	$1,596,230

AUDITORS' REPORT

To the Shareholders of
AGNICO MINES LIMITED:

We have examined the balance sheet of Agnico Mines Limited as at December 31, 1966 and the statements of income, deficit and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the aforementioned financial statements present fairly the financial position of the company as at December 31, 1966 and the results of its operations and the source and application of its funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

THORNE, MULHOLLAND, HOWSON & MCPHERSON,
Chartered Accountants.

Toronto, Canada,
February 16, 1967.

Approved on behalf of the Board:

PAUL PENNA, Director.

BERNARD KRAFT, Director.

The accompanying notes are an integral part of this statement.

AGNICO MINES LIMITED

STATEMENT OF INCOME

Year ended December 31, 1966
(With comparative figures for 1965)

	1966	1965
REVENUE:		
Production of metals	1,083,288	1,486,633
Less Marketing expenses	75,672	100,775
	1,007,616	1,385,858
Custom milling	8,055	147,580
Royalty income	16,200	27,327
	1,031,871	1,560,765
OPERATING EXPENSES:		
Mining and development	654,746	805,745
Milling	166,747	201,603
Transportation of ore	23,455	38,883
Royalty expense	3,513	4,740
Administration	51,297	50,174
	899,758	1,101,145
Less Sundry income	12,560	13,642
	887,198	1,087,503
Income before undernoted items	144,673	473,262
Depreciation	37,920	42,938
Amortization of deferred development expenditures	107,283	107,282
Outside exploration	86,561	
	231,764	150,220
NET INCOME (LOSS) FOR YEAR	$ (87,091)	$ 323,042

STATEMENT OF DEFICIT

Year ended December 31, 1966
(With comparative figures for 1965)

	1966	1965
Deficit at beginning of year	880,013	1,203,055
Net income (loss) for year	(87,091)	323,042
DEFICIT AT END OF YEAR	$ 967,104	$ 880,013

AGNICO MINES LIMITED

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

Year ended December 31, 1966
(With comparative figures for 1965)

	1966	1965
FUNDS MADE AVAILABLE:		
By operations:		
Net income (loss) for year	(87,091)	323,042
Expenses which do not involve an outlay of funds:		
Depreciation	37,920	42,938
Amortization of deferred development expenditures	107,283	107,282
	58,112	473,262
Fire insurance proceeds		17,659
Proceeds from disposal of fixed assets	2,800	
Decrease in deferred operating expenditures, net	1,883	
	62,795	490,921
FUNDS APPLIED:		
Addition to fixed assets	393,541	69,448
Deferred expenditures		113,595
Special refundable tax	3,902	
Increase in power contract deposits	3,030	385
	400,473	183,428
Increase (decrease) in working capital	(337,678)	307,493
Working capital at beginning of year	857,182	549,689
Working capital at end of year	$ 519,504	$ 857,182
Current assets	595,891	952,748
Current liabilities	76,387	95,566
	$ 519,504	$ 857,182

AGNICO MINES LIMITED

NOTES TO FINANCIAL STATEMENTS

Year ended December 31, 1966

1. Subsidiary Companies:

   The accounts of the subsidiaries, Cobalt Properties Limited and Medusa Mines Limited, have not been consolidated herein because the companies are inactive.

2. Buildings, Machinery and Equipment:

   Buildings, machinery and equipment are valued on the basis of an appraisal made by Dominion Appraisal Company Limited on May 8, 1953, with subsequent additions at cost.

3. Mining Properties:

   Mining properties acquired at the time of incorporation of the company are carried at a nominal value of $1. Subsequent additions are at cost.

4. Other Statutory Information:

   Remuneration of directors, as such, amounted to $250 in 1966 and $200 in 1965.

Approximately one million tons of tailings are contained in the bed of Cobalt Lake, containing an estimated average of four ounces of silver per ton.

The reclamation barge before all pipe lines were installed. In test run barge handled up to 60 tons of slurry per hour. The reclamation concentrator is designed to treat 1,000 tons of tailings per day.

Printed in Canada.

AR05

Aerial view looking across a portion of the Town of Cobalt; Agnico reclamation plant upper left.

file

AGNICO MINES LIMITED

Executive and Head Office
Suite 1101, 365 Bay Street
Toronto 1, Ontario, Canada

corp.

INTERIM REPORT TO THE SHAREHOLDERS

For Nine Month Period Ended September 30, 1966

AGNICO MINES LIMITED

Interim Report to the Shareholders

Operations at your company's properties in the Cobalt Area continue to emphasize a heavy exploration program in conjunction with regular mine production. In addition, construction of the new tailings retreatment plant was initiated and completed during the period under review and operating tests are now being conducted. These various projects have been financed from working capital.

As shown in the comparative table summarizing production for the nine month period ended September 30, 1966, silver recovery is lower than the total for the same period last year. This reduction was substantially confined to the third quarter and reflects a combination of a lower average grade of ore treated, the two week shut down of the mill for the annual vacation period, plus a shortage of skilled underground personnel. In addition, during the latter part of August, there was a temporary reduction of mill operations due to the failure of one of the power transformers with the result that only one of the two ball mills normally used were operative while repairs were made.

In addition to the comparative table for the nine month period, separate tables are shown for the six month period ended June 30, 1966, and the three months or third quarter ended September 30, 1966. It is noted that the tonnage treated during the third quarter of the current year totalled 9,250 tons with an average recovered grade of 14.46 ounces silver per ton, for a total of 132,783 ounces. Tonnage treated during the same period in 1965 was 17,970 tons with an average recovered grade of 15.83 ounces silver per ton, for a total of 284,386 ounces.

The silver recoveries for the comparative six month period for 1965 and 1966 were approximately equal, at 476,662 ounces and 480,136 ounces, respectively, although the ore treated in the first half of this year was a higher average grade, being 16.68 ounces per ton compared with 13.1 ounces in the first half of 1965.

COMPARATIVE SUMMARY OF PRODUCTION

Nine Month Periods Ended September 30, 1965 and 1966

	1965	1966
Tons Milled	54,350	38,025
Silver — ozs.	761,048	612,919
Cobalt — lbs.	61,425	54,532
Copper — lbs.	48,526	21,937
Nickel — lbs.	17,930	16,720
Gross Value of Metals	$1,027,120	$ 828,848
*Gross Operating Profit at Mine	$ 285,000	$ 102,500

SIX MONTH PERIOD ENDED JUNE 30, 1966

Tons Milled	28,775
Silver — ozs.	480,136
Cobalt — lbs.	44,736
Copper — lbs.	17,863
Nickel — lbs.	14,152
Gross Value of Metals	$ 649,169
*Gross Operating Profit at Mine	$ 137,000

THREE MONTH PERIOD ENDED SEPTEMBER 30, 1966

Tons Milled	9,250
Silver — ozs.	132,783
Cobalt — lbs.	9,796
Copper — lbs.	4,074
Nickel — lbs.	2,568
Gross Value of Metals	$ 179,680
*Gross Operating Profit at Mine (Loss)	$ 34,500

*Before deductions for administration, depreciation and deferred development. The above figures in respect to gross operating profit are subject to adjustment in final audit and may involve a reallocation of exploration charges either against current mine operating revenue or to deferred development expenditures.

CHRISTOPHER AND O'BRIEN MINES

As previously reported, the Christopher Mine was placed on a salvage basis early in the year and the final shipment of ore was made during the month of May. Operations were also suspended at the O'Brien Mine after exhaustive underground work including exploratory diamond drilling failed to disclose any new ore occurrences, with the final shipment of ore during July. A geochemical (soil sampling) survey is being carried out on claim #402 adjacent to the north of the O'Brien to provide a basis for consideration of further exploration by surface diamond drilling.

AGNICO 407 MINE

This property is now the main production unit and provides the bulk of mill feed. Crosscutting and drifting on the two main production levels at the 300 foot and 365 foot horizons, continues to open up new oreshoots with several stopes being worked. During September, a branch vein containing high grade silver was encountered at the south end of the

30-19 stope and was exposed for a length of 85 feet on the second or 300 ft. level. On the third level at 365 feet, a crosscut was advanced to develop a new vein south of the 36-3 stope.

The development heading on the fourth level at 445 feet is being steadily advanced to the southeast toward the area of diamond drill intersections about 1,200 feet from the shaft. Numerous silver veins have been encountered during the crosscutting and detailed drilling is being carried out to trace and evaluate these occurrences. It is also planned to drill long holes to the south to probe the former Penn Canadian property containing a large unexplored area.

CART LAKE PROPERTY

At the Cart Lake #2 shaft on the west side of Cart Lake and about 3,000 feet west of the 407 Mine, the #1 and #2 veins have been stoped on the 100 foot level and sub-level. This opening also provided access to the #86 shaft where a modest tonnage of ore is being recovered. Generally, however, the Cart Lake #2 shaft program involving underground work including exploratory diamond drilling has not located any substantial ore grade silver occurrences, and in view of the cost of maintaining this unit and the resultant modest ore recovery, it will probably be phased out later this year.

The 150 Shaft project on the east side of Cart Lake and about 2,000 feet west of the 407 Shaft, continues as a basic exploration unit. Two diamond drills are being employed to explore from the underground workings, one directed to short hole testing of known veins at various horizons, the second probing the intervening area to the west between the 407 and 150 shafts.

TAILINGS RECLAMATION PROJECT

This project has been described in previous reports to the shareholders. It is designed to recover the silver contained in the estimated one million tons of tailings in the bed of Cobalt Lake owned by your company which are the product of various former milling operations of the Cobalt Camp. The tailings are estimated to average about four ounces of silver per ton.

A study of the economics of this project commenced in August, 1964, and in March the following year Kilborn Engineering Limited was authorized to proceed with the preparation of a feasibility study. Subsequently, detailed metallurgical tests were carried out to devise the flow sheet with these further studies indicating that additional treatment by regrinding would improve recovery above the previously estimated 60% to 65% range. Actual construction of the reclamation plant commenced during May of this year under the supervision of Kilborn Engineering Limited.

Construction of the 1,000 ton capacity treatment plant and installation of ancillary equipment has now been completed and a test run was made during October with satisfactory results. The indicated recovery achieved in this test run was 75.7%. In addition to the construction of the tailings retreatment complex, it was necessary to lower the water level of Cobalt Lake to expose the bedded tailings for recovery by hydraulic methods. The estimated cost of this project is approximately $360,000.

Your company plans to operate the tailings treatment project on a six to seven months per year basis, closing down during the winter months when materials handling would be made difficult by freezing conditions. During the winter months it is planned to operate the Penn Mill, drawing feed from ore which will be stockpilled during the summer months, plus current mine production. This will enable the most efficient employment of mill personnel and can be expected to have a favorable effect on milling costs with operations at optimum rates. A series of photographs taken during September, showing various phases of the plant construction and equipment, are reproduced in this Interim Report.

Regular operation of the reclamation plant is scheduled for next spring and it is indicated that an appreciable profit will be realized at the present price of silver.

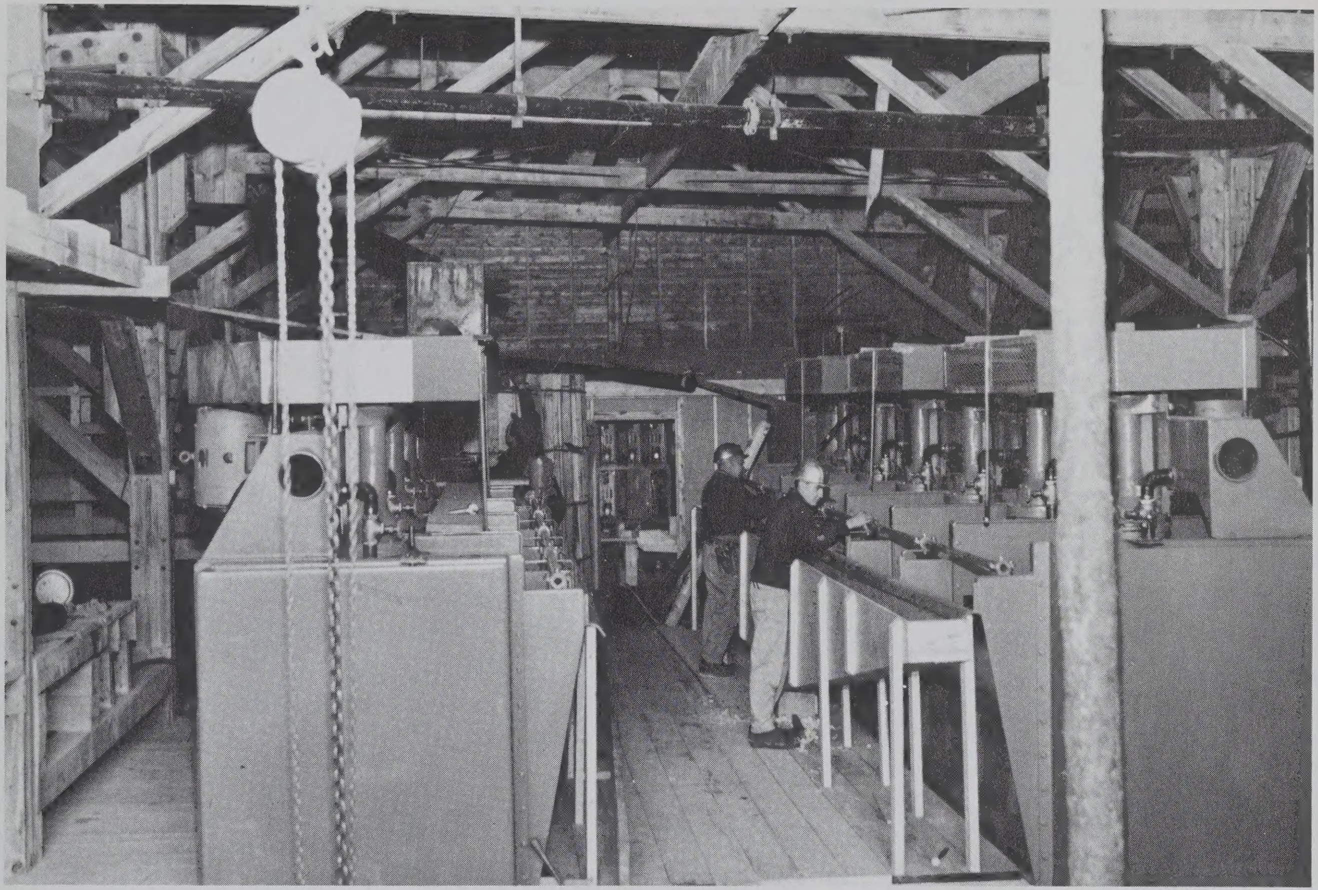
On behalf of the Board of Directors,

"PAUL PENNA"
Managing Director

November 21, 1966

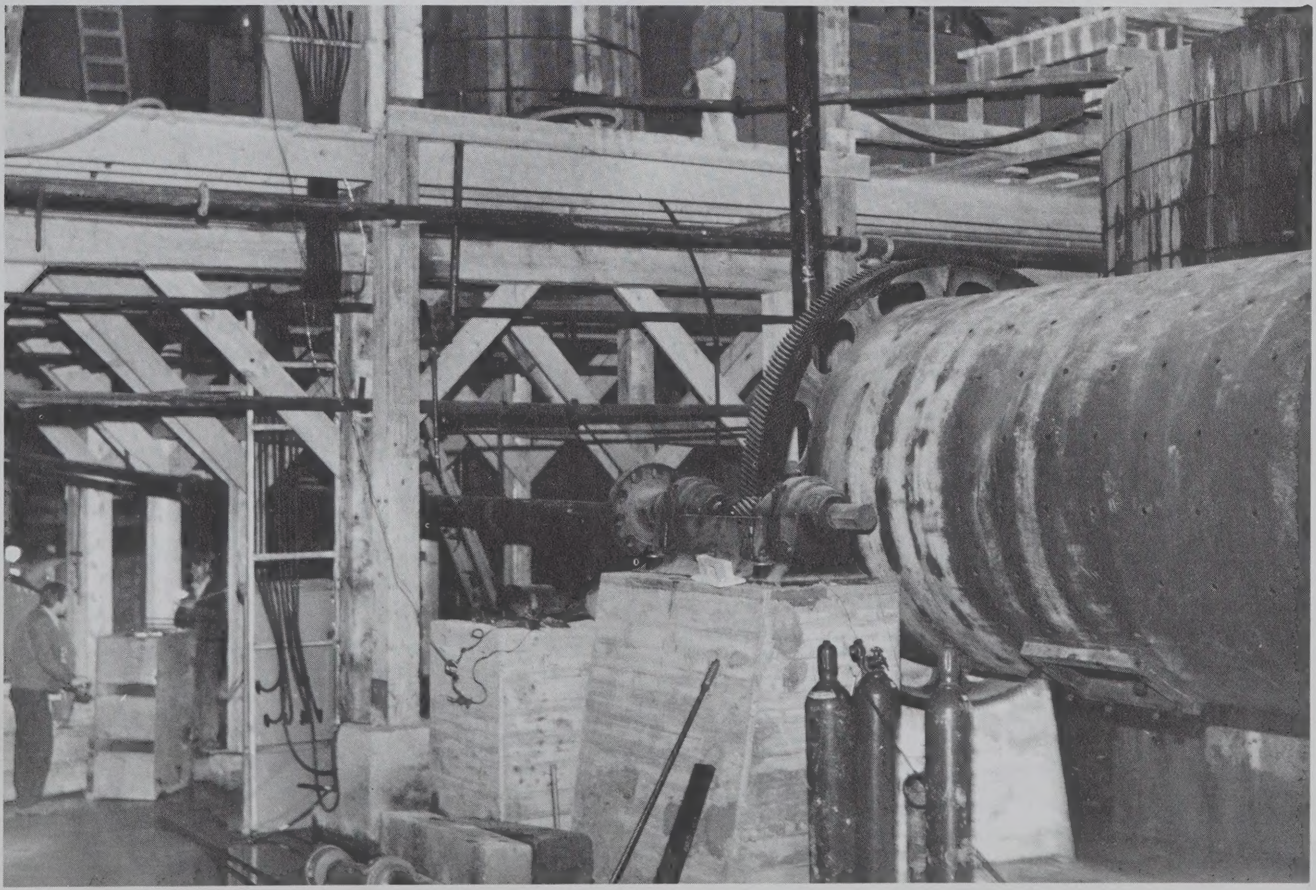
Left: Hoisting heavy equipment into mill building. The plant is located on the southeast shore of Cobalt Lake and when operating at capacity will treat 1,000 tons of tailings per day.

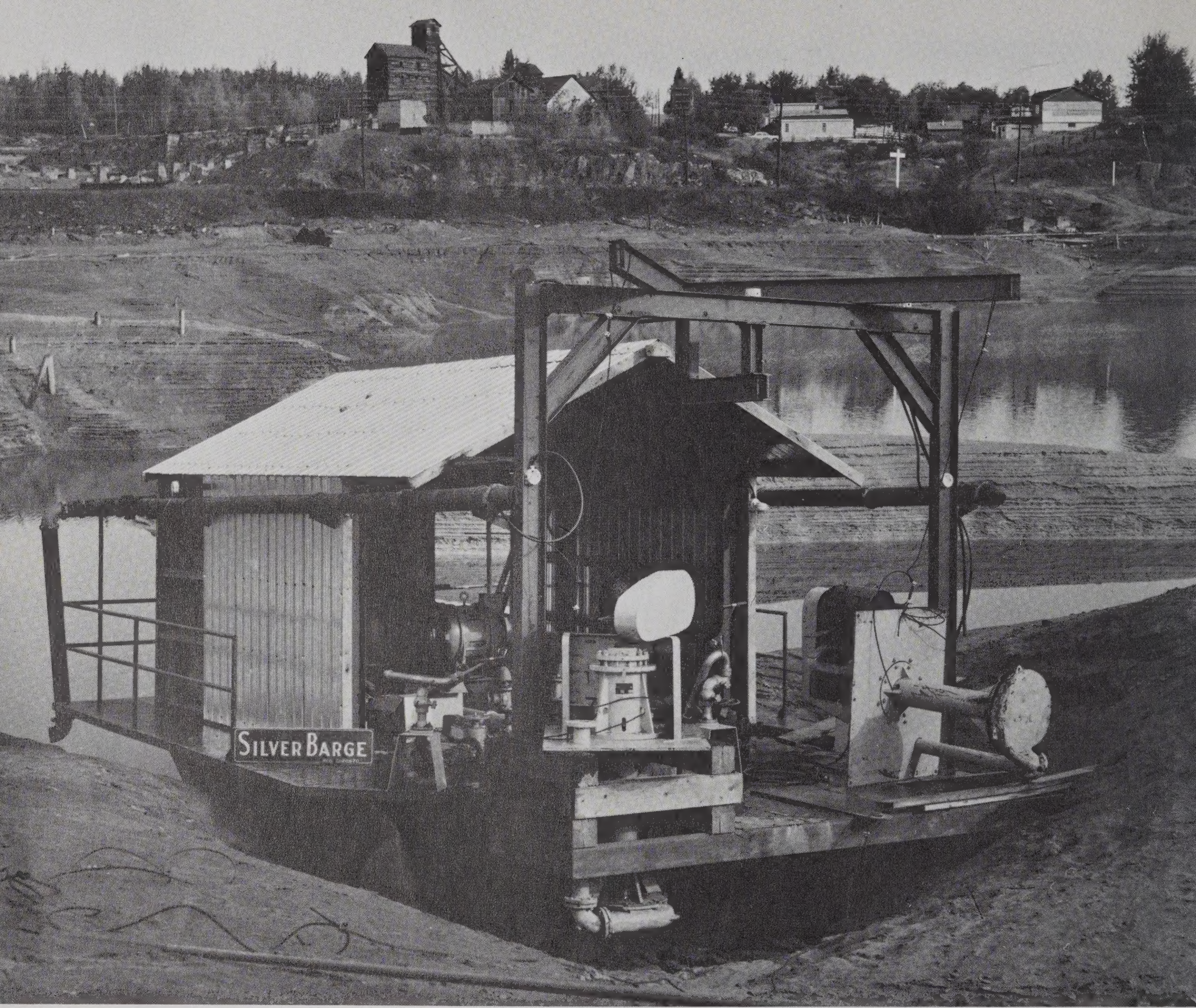
Below: Workman installing equipment in the reclamation plant building. Silver content in the tailings is recovered by a combination of jigs and flotation. Tests runs varying from one shift per day to full 24-hour operation were made latterly in October.



Top: The battery of roughers and scavengers.

Below: One of the two ball mills comprising the grinding circuit.





Top: The reclamation barge before all pipe lines were installed. The barge is equipped with three pumps, two of these hydraulic the tailings, one piped to an on-shore surge tank to feed the mill; the other as a source of solids-bearing water for use in monitoring, cutting down banks of tailings into the pond in which the barge will operate.

Left: The reclamation barge in operation during test run during which it handled up to 60 tons of slurry per hour.

Top: This picture shows the tailings from former milling operations in the bed of Cobalt Lake with the mill building in the background.

Below: Aerial view of the mill building looking northwest across Cobalt Lake.

Printed in Canada.